

Work Order ID 56384 - 1

February 22, 2010 10:31:36 AM

Page 1

Item ID: D3965-4

Accept

Setup Start

Revision ID:

Stop

Item Name: Bearing, Spherical

Start Date: 2/22/10 Start Qty: 20.00

Cust Item ID:

Required Date: 2/26/10 Req'd Qty: 20.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3965

Rev A

100

0.00

Purchasing

Memo

0.00

Purchasing

PURCHASING

Issue P/O:

Purchase Part Number: 63215K32 or 63215K52

Possible Supplier: McMaster

Material release note is required

110

Receive & Inspect for Damage & Mat'l Certs

0.00

Packaging

Memo

0.00

Packaging

RA 10-2-22
(20)

P114/23 (10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56384

February 22, 2010 10:31:36 AM

Page 2

Item ID: D3965-4

Accept

Setup Start

Revision ID:

Stop

Item Name: Bearing, Spherical

Start Date: 2/22/10 Start Qty: 20.00

Cust Item ID:

Required Date: 2/26/10 Req'd Qty: 20.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

QC6- Inspect dimensions to drawing

0.00

→ 8 10/02/24

QC

Memo

0.00

(41)

Quality Control

130

Identify as per dwg & Stock Location: 100

0.00

Packaging

Memo

0.00

10/03/2010 (105)

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

10/03/03

Quality Control

CY 03/01/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 22, 2010 10:31:43 AM

Page 1

Work Order ID: 56384



Parent Item: D3965-4



Parent Item Name: Bearing, Spherical



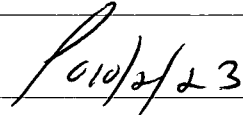

Start Date: 2/22/10

Required Date: 2/26/10

Comments: IPP RevA: New issue DD verified by:EC

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
63215K32  Spherical Bearing		Purchased	No			110	Each	3.0000	20.0000 		2/23/10 	15 

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST 3

111278 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

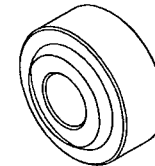
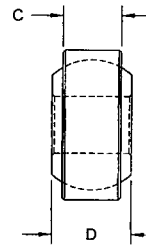
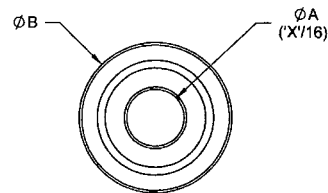
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

SPECIFICATION CONTROL DRAWING



D3965-X BEARING, SPHERICAL

WHERE 'X' IS I.D. IN 1/16" OF AN INCH
EG Ø 1/4" (4/16") I.D. BEARING = D3965-4

DART P/N	SUPPLIER	SUPPLIER P/N	A	B	C	D	STATIC RADIAL LOAD CAP. lbs
D3965-3	McMASTER-CARR	63215K31	0.188	0.563	0.281	.219	3,975
D3965-4	McMASTER-CARR	63215K32 OR 63215K52	0.250	0.656	0.344	0.250	6,040
D3965-5	McMASTER-CARR	63215K53	0.313	0.750	0.375	0.281	8,750
D3965-6	McMASTER-CARR	63215K34	0.375	0.813	0.406	0.313	10,540

NOTES:

- 1) MATERIAL: 440C STAINLESS STEEL WITH PTFE LINER
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A

RELEASED
09/08/25 N/A

A		NEW ISSUE		RF	09.07.09
REV.		DESCRIPTION		BY	DATE
DESIGN	RF	DART AEROSPACE LTD			
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA			
CHECKED		DRAWING NO.	REV. A		
MFG. APPR.		D3965	SHEET 1 OF 1		
APPROVED		TITLE	SCALE		
DE APPR.		BEARING, SPHERICAL	NTS		
DATE	09.07.09	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMERCE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PO REPRINT

Purchase Order ID PO11396

Purchase Order Date 2/22/10

PO Print Date 2/22/10

Page Number 1 of 1

Order From :

VU-MCM001

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

FAXED
Feb 22

Contact Name
Vendor Phone 330 995 5500
Vendor Fax 330 995 9600
Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency USD
FOB

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Revised

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	63215K52	Bearing Spherical	2/25/10 Yes	20.00 Each	Purolator ground	\$16.6700	\$333.40
		Special Inst:	AS PER DWG:D3965 REV:A B#56384				
2	9610K17	GROMMET	2/25/10 Yes	✓ 10.00 Each	Purolator ground	\$11.9000	\$119.00
		Special Inst:	AS PER DWG: d3619 REV:A BATCH# 56383				
3	9776K94	Flame retardent nylon Hook & Loop	2/22/10 Yes	75.00 Each	Purolator ground	\$2.2390	\$167.93
		Special Inst:	As per DWG: D3800 Rev: B Batch# 56377 Batch# 56393				
PO Total:							\$620.33

Change Nbr: 5

Change Date: 2/22/10

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable



McMASTER-CARR

200 Aurora Industrial Parkway
Aurora OH 44202
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO11396

Page

McMaster-Carr Number
7164148-02

02/22/

Line	Description	Ordered	Shipped	
1	63215K52 Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 1/4" ID, 21/32" OD, 11/32" Overall Width	20 Each	15	3 - 483 - 02 07 - 01 K52 15 EA
	Unit Price: \$16.67			
	Extended Price: \$250.05			
2	9610K17 Military Specification Grommet Kit, with Teeth Washer, Trade Size 1, 5/16" ID, 48 Grommets	10 Each	10	1 - 313
	Unit Price: \$12.90			
	Extended Price: \$129.00			

8/10/02/24

✓

Pcnp/23

Shipped separately from our Chicago warehouse on 02/22

1	63215K52 Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 1/4" ID, 21/32" OD, 11/32" Overall Width	20 Each	5
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Charges for this shipment

Merchandise Amount:	\$379.05
Sales Tax:	\$18.95
Total:	\$398.00

Dart Aerospace Ltd

E

11
12X7X5
132

